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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/944,119	09/04/2001	Allan P. Plummer	1340-7	1754
23117	7590	02/11/2004	EXAMINER	
NIXON & VANDERHYE, PC 1100 N GLEBE ROAD 8TH FLOOR ARLINGTON, VA 22201-4714			NGUYEN, PHUNG	
			ART UNIT	PAPER NUMBER
			2632	
DATE MAILED: 02/11/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/944,119	PLUMMER, ALLAN P.	
	Examiner Phung T Nguyen	Art Unit 2632	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 17 November 2003.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 1-30,44-46 and 49-52 is/are allowed.
- 6) Claim(s) 31-43,47,48,53 and 54 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 9.	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 31-43, 47, 48, 53, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hollabaugh et al. (U.S. Pat. 4,131,882) in view of Evelyn-Veere et al. (U.S. Pat. 4,176,395).

Regarding claim 31: Hollabaugh et al. disclose a digital two-wire irrigation control system with feedback, which comprises distributing power and a reference datum to the second stations via a distribution medium (col. 4, lines 39-52). Hollabaugh et al. do not teach activating the second stations at a prescribed phase offset from the reference datum as claimed. However, activating the second station at a prescribed phase offset from the reference datum is old and known in the art as taught by Evelyn-Veere et al. (col. 2, lines 22-38, and col. 31, lines 28-41). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teaching of Evelyn-Veere et al. into the system of Hollabaugh because they both teach an irrigation system for controlling a large number of irrigation or sprinkler valves in accordance with one or more desired schedules of operation. It is seen that the teaching of Evelyn-Veere et al. would increase the flexibility of the system of Hollabaugh by providing automatic selection can be made from multiple schedules, each of which is designed to provide optimum irrigation of a particular area for a particular climatic or soil condition.

Regarding claim 32: Hollabaugh et al. disclose the alternating power signal has a substantially square waveform (col. 11, lines 49-54).

Regarding claim 33: Hollabaugh et al. disclose a plurality of activation marks after the reference datum (col. 11, lines 49-68, and col. 12, lines 1-25).

Regarding claim 34: Hollabaugh et al. disclose a predetermined sequence of positive and negative components in the alternating power signal (col. 4, lines 64-68, and col. 5, lines 1-12).

Regarding claim 35: Refer to claim 34 above.

Regarding claim 36: Hollabaugh et al. disclose sending instruction to each station whether or not to activate embedded in the plurality of activation marks (col. 5, lines 4-8).

Regarding claim 37: All the claimed subject matter is already discussed in respect to claims 31 and 36 above.

Regarding claim 38: Hollabaugh et al. disclose the power switching circuit operable to provide an alternating power signal of variable frequency over the distribution medium (col. 4, lines 39-45, and col. 11, lines 42-54).

Regarding claim 39: Hollabaugh et al. disclose the alternating power signal that has a substantially square waveform (col. 11, lines 19-54).

Regarding claim 40: Refer to claim 33 above.

Regarding claim 41: Refer to claim 34 above.

Regarding claim 42: Refer to claim 35 above.

Regarding claim 43: Refer to claim 36 above.

Regarding claim 47: Hollabaugh et al. disclose the second stations comprising part of an irrigation system (col. 4, lines 39-52).

Regarding claim 48: Refer to claim 47 above.

Regarding claim 53: All the claimed subject matter is already discussed in respect to claim 37 above.

Regarding claim 54: Refer to claim 47 above.

Allowable Subject Matter

3. Claims 1-30, 44-46, and 49-52 are allowed.

Response to Arguments

4. Applicant's arguments with respect to claims 31-43, and 47, 48, 53, and 54 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Snoddy et al. [U.S. Pat. 4,569,020] disclose an irrigation controller.

b. Young et al. [U.S. Pat. 6,622,933] disclose a pressure sequence controlled valve and sprinkler system using same.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phung Nguyen whose telephone number is (703)308-6252. The examiner can normally be reached on Monday to Friday from 8:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel J. Wu, can be reached on (703)308-6730. The fax phone number for this Group is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 306-0377.

Application/Control Number: 09/944,119
Art Unit: 2632

Page 6

Examiner: Phung Nguyen

Date: February 4, 2004


DANIEL J. WU
PRIMARY EXAMINER
2/07/04